

CLAIMS:

- [1] An editing system configured to include a paper which is prepared to specify an entry location and on which paper space information including a figure, a character, and the like is printed, a digital pen for acquiring information entered by handwriting as stroke data, and a pen server for executing an editing process of the paper space information on the basis of the stroke data acquired by the digital pen, the editing system characterized in that:
- the pen server is configured to include:
    - a command database for inclusively storing command execution information for indicating a content of the editing process that the pen server is caused to execute to have correspondence to one or more command for specifying an editing process of the paper space information;
    - a paper space information database for storing the paper space information that corresponds to locations on the paper;
    - a character recognizing portion that recognizes a character from the stroke data and converts the recognized character into a character code;
    - a paper space information cutout portion that recognizes a line from the stroke data and extracts the paper space information included in a target region specified by the recognized line from the paper space information database;
    - a command recognizing portion that detects the command stored in the command database from the character code outputted by the character recognizing portion; and
    - a command executing portion that executes the editing process on the basis of the command execution information corresponding to the command detected by the

command recognizing portion.

- [2]           The editing system as claimed in claim 1 characterized in that the paper space information cutout portion recognizes the character or a mark, written in the vicinity of the target region and relates it as a symbol for identification to the extracted paper space information.

- [3]           The editing system as claimed in claim 2 characterized in that in the command database are stored to have correspondence to a predetermined command:  
                parameter definition information for defining that a parameter added to the command is the symbol; and  
                command execution information for outputting as an electronic file the paper space information, extracted by the paper space information cutout portion, related to the parameter.

- [4]           The editing system as claimed in claim 2 characterized in that in the command database is stored command execution information for converting, at the character recognizing portion, the stroke data entered on the paper with the digital pen into a character code outputted as an electronic file.

- [5]           The editing system as claimed in claim 4 characterized in that in the command database is further stored correspondingly to a predetermined second command:  
                parameter definition information for defining that a parameter added to the second command is the symbol;  
                and  
                command execution information for causing insertion of the paper space information, related with the parameter, extracted by the paper space information cutout portion, at an entry location of the second command of the electronic file on the assumption that it is entered after entry of the first command.

[6] The editing system as claimed in claim 2 characterized in that the pen server is configured to further include a classified information database for storing a subclass title corresponding to a subclass used in International Patent Classification and a subgroup title corresponding to a subgroup, in the command database are stored to have correspondence to a predetermined command:

parameter definition information for defining that a first parameter added to the command is the symbol, a second parameter is the subclass, and a third parameter is the subgroup; and

command execution information for searching the classified information database for the subclass title corresponding to the second parameter, and the subgroup title corresponding to the third parameter to output an electronic file, and adding link information directed to the electronic file to the paper space information related with the first parameter.

[7] The editing system as claimed in claim 2 characterized in that in the command database are stored to have correspondence to a predetermined command:

parameter definition information for defining that the parameter added to the command is the symbol; and

command execution information for converting at the character recognizing portion the stroke data entered with the digital pen in the target region recognized by the paper space information cutout portion, related with the parameter, into a character code and adds it to the paper space information of the paper.

[8] The editing system as claimed in any one of claim 1 or 7 characterized in that the paper on which the paper space information is printed is configured to include:

a specifying region for specifying a region for editing the paper space information with the digital pen;

and

a command entry region for entering a command with the digital pen.

- [9] An editing method in an editing system configured to include a paper which is prepared to specify an entry location and on which paper space information including a figure, a character, and the like are printed, a digital pen for acquiring information entered by handwriting as stroke data, and a pen server for recognizing a command for causing an editing process of the paper space information from the stroke data acquired by the digital pen, the editing method characterized in that:

the pen server executes the editing process including:

a step of acquiring the stroke data entered on the paper;

a step of recognizing a line at a paper space information cutout portion of the pen server and judges the presence or absence of a target region specified by the recognized line;

a step of extracting at the paper space information cutout portion the paper space information contained in this region from the paper space information, corresponding to a location on the paper stored in the paper space information database, when the target region exists on the paper;

a step of recognizing a character from the stroke data to output a character code at a character recognizing portion of the pen server;

a step of relating a character or a mark entered in the vicinity of the target region as a symbol for identification to the extracted paper space information at the paper space information cutout portion;

a step of detecting at the command recognizing portion of the pen server the command stored in the

command database from the character code outputted by the character recognizing portion with reference to a command database storing correspondingly to one or more command for identifying the editing process of the paper space information, command execution information for indicating a content of the editing process that causes the pen server to execute and parameter definition information for defining a parameter added to the command; and

a step of executing at the command executing portion of the pen server the editing process on the basis of the command execution information corresponding to the command detected at the command recognizing portion.

[10] The editing method as claimed in claim 9 characterized in that the paper on which the paper space information is printed is configured to include:

a specifying region for specifying a region for editing the paper space information with the digital pen; and

a command entry region for entering a command with the digital pen.

[11] A program for making a computer function as a pen server as claimed in any one of claims 1 to 7.